0.00

Memo

QC

Quality Control

| NCR: | Yes | / | No |
|--------|-----|---|-----|
| IVCIV. | 162 | , | 140 |

WORK ORDER NON-CONFORMANCE / UPDATE

| DQA: | | | Date: | |
|------|---|---|-------|--|
| | _ | - | - | |

| iven. | es / NO | | | | WORK ORDER NON-C | | IVIAIVEL / OF I | DAIL | QA Closed: | Date | e: | | | |
|---------------|------------|-----------|------------|----------|----------------------------|-------------|---|-----------|------------------------|----------------------------|---------------------|--|--|--|
| Work Orde | r· | - | | | DISPOSITION | | AGAINST DEPARTMENT/PROCESS | | | | | | | |
| Part No. | | | | | Rework Scrap | | Skid-tube Crosstube Machining Small Fab | | | Water Jet d. Eng. Coor. | Engineering Quality | | | |
| raitiv | · | | | | Use-as-is | 1 1 | noforming | Finishing | | e/Packaging | Other | | | |
| NCR N | 0. | | | | Work Order Update | | | | | Supplier | | | | |
| Root | | | | Descri | ption of work order update | Initial | Act | tion | Sign & | : | | | | |
| Cause | Date | Step | Qty | | or Non-conformance | Chief Eng | Descr | ription | Date | Verification | QC Inspector | | | |
| Doc/Data | | [- | | | • | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | | |
| Setup | _ | | | | | | | | | | | | | |
| Other | _ | | | | | | | | | | | | | |
| Process | _ | | | | | | | | | | | | | |
| Supplier | _ | 1 | | | | | | | | | | | | |
| Training | _ | | | | | | | | ! | | | | | |
| Unapproved | | <u> </u> | <u> </u> | | | AULT CATE | CORV | | | l | | | | |
| Landin | g Gear | | | | General C | AULI CATE | GORT | | | | | | | |
| | Bending | | | | Bend | Grain | T _{Croin} — | | | Г | Pressure/Forced | | | |
| ŀ | Centre No | nt Conce | ntric to 1 | | BOM/Route | Hardw | are | - | Ovalized Over/Under | tolerance | Temperature/Cure | | | |
| } | Cracks | or concer | itile to v | °′3 | Broken/Damaged | ⊢ | tion Incomplete | <u> </u> | Part Incorre | - | Weld | | | |
| | Crushed/0 | Crimped | | - | Burrs | - | tions Incomplete/l | Unclear | Part Lost/M | - t | Wrong Stock Pulled | | | |
| ŀ | Cuffs | opca. | | | Contamination | _ | enance | | Part Moved | | | | | |
| ľ | Heat Trea | ıt | | | Countersink | Mislab | | | Positioned V | Vrong | | | | |
| ľ | Inspection | | Tube | | Cut Too Short | Misrea | | | Power Loss/ | | Other | | | |
| ļ | Ripples in | - | | | Drill Holes | Offset | | <u>L.</u> | , | ν L | | | | |
| ľ | Torque W | | xtrusio | n | Drawing | | Calibration | | | | | | | |
| | Turning S | | | | Finish | — | Sequence | | | | | | | |
| Ţ | Wave/Tw | | | | Folio | | e Dimensions | | | | | | | |

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

| Work Ordenserver 13-1 | | | | *900 | | | | | Page 2 | | | | |
|--|---------------------|--|------------|------------------------------|--------------------------|--------|--------------|---------------|------------|---------------|------------------|----------------|--------|
| Item ID: Revision ID: Item Name: | D412-666- | | | Accept | *N900 |)* | Setup | Start Stop | 14.7 | S1* S2* | ** | | |
| Start Date: Required Date: Reference: | 9/13/12 10/05/12 | Start Qty: 2.00 Req'd Qty: 2.00 | *2* *2* | | Cust Item I Customer: | D: | | | | | | ()/ | |
| Approvals: | Process P | lan: | Date: | | Date:Date: | | | | Run | Start Stop | | R1* R2* | |
| Sequence ID/ Work Center I 130 *120* Packaging | D | Operation Description Packaging Memo | | Set Up/ Run Hours 0.00 | Tool ID | Tool # | Plan Code | Accept Qty | Rej Qty | | Reject Number | Insp. Stamp | |
| Packaging | | | | | | | | | , | · _] | | 20 H | \ / |

*14**0***

Memo

0.00

Quality Control

12/9/20 Det 12/9/20 12.09-20

| | | | | | | | | | | | | DQA: | Date | • | |
|--|---------------|---|---------|-----------|------|---|---|-----|-------------------------------|---|---|--|---|--|--|
| NCR: | Yes | / No | | | | | WORK ORDER NON-CONFORMANCE / UPDATE | | | | | | | | |
| | | • | | | | | | | | | | | Date | · | |
| Vork Ord | er: | | | | | | DISPOSITION | | AGAINST DEPARTMENT/PROCESS | | | | | | |
| Part No | | | | | | | Rework Scrap Use-as-is Work Order Update | | Thermoforming Finishing | | Crosstube Small Fab Finishing Composite | - | Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other | |
| | | | | 1 | | _ | | | | | | | | 1 | |
| Root | | Data | Cton | Otyl | Desc | - | ntion of work order update r Non-conformance | 1 | nitial | | tion | Sign & Date | Verification | QC Inspector | |
| Cause oc/Data quip/Tooling perator laterial etup ther rocess upplier raining napproved | Date Step Qty | | | | · · | | nief Eng Description | | | Date | verification | QC IIISPECIOI | | | |
| | | | | <u> </u> | | - | F | AUL | T CATE | GORY | | | | | |
| Land | ng (| Gear | | | | | General | | _ | | | _ | | _ | |
| | | Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat | | | | - | Bend BOM/Route Broken/Damaged Burrs Contamination Countersink | | Instruct Mainte Mislabe | on Incomplete ions Incomplete/ nance led | 'Unclear | Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V | ct issing | Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other | |
| | \vdash | Inspection | | rube | | | Cut Too Short Drill Holes | - | Misread Offset | I | L | Power Loss/ | ourge [| Tottlei | |
| | | Ripples in Torque W | | Extrusion | | | Drawing Trawing | - | 4 | Calibration | | | | | |
| | | Turning S | onuence | 1 | | | Finish | | Out of s | equence | | | | | |

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

September-13-12 9:16:12 AM

Work Order ID:

90013

Parent Item:

D412-666-011

Parent Item Name:

Gross Weight Towing

Start Date: 9/13/12

Required Date: 10/05/12

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP Rev:B Adde

v:B Added GHG 002 NG 02-03-06

IPP Rev:C As per Rev C J

JLM 07-09-07 Verified By:EC

| | Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-----------------------|--------------|---------------|----------------|-------------|
| W | AN6-15A Bolt | | Purchased | No | | | 110 | Each | 82.0000 | 4 | 8 | 13B | | |
| K٦ | • | | | | Location | | Loc Qty | Lo | oc Code | | | / | | |
| | | | | | ST341 | | 82 | | | | | | | |
| | | | | | | 20423 | 82 | | | 18 | 10423 | | | |
| | AN6-45A Bolt | | Purchased | No | | | 110 | Each | 32.0000 | 4 | 8 | 21 | 3 4 | E recourses |
| "" XA | | | | | Location | | Loc Oty | Lo | oc Code | | | V | | ** |
| ~~~ | | | | | ST341 | | 20 | | | | | | | |
| | | | | | | 22993 | 20 | | | | | | | |
| 1 | | | | | ST343 | | 12 | | | | | | | |
| | | | | | 1 | 20423 | 12 | | | 12 | 0423 | | | |
| اله | AN960JD616 Washer | NAS1149D0663J | Purchased | No | | | 110 | Each | 0.0000 | 8 12 ⁻³ | 16 3021 | 21 | 3 | SQ . |
| ·M | D2888 Lug | | Manufactured | No | | | 110 | Each | 8.0000 | 2 | 4 | - 2. | B | 1 |
| Κ'ι | | | | | Location | | Loc Qty | Lo | oc Code | | | V | | * * |
| | | | | | ST479 | | 8 | | | | | | | |
| 1 | | | | | | 35703 | 8 | | | 8: | 5703 | | | |
| W | MS21042L6 Nut | | Purchased | No | | | 110 | Each | 777.0000 | 4 | 8 | JB | 12/ | 109/19 |
| \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \ | 2 | | | | Location | | Loc Qty | Le | oc Code | | | V | 8 | P. |
| | | | | | 314 | | 486 | | | | | | | |
| | | | | | | 122441 | 486 | | | 12 | 2441 | | | |
| | | | | | ST300 | | 291 | | | | • | | | |
| | | | • | | | 117677 | 25 | | | | | | | |
| | | | | | | 118384 | 3 | | | | | | | |
| | | | | | | 118927 | 48 | | | | | | | |
| | | | | | | 119075 | 15 | | | | | | | |
| | | | | | 1 | 120308 | 200 | | | | | | | |

| | | | | | | | DQA Date | | | | | | | | | | |
|--------------|------|------------|------------|----------|------|------|-------------------------------------|--|--|---------------------------------------|------------------|------------------------|--------------|---------------------------|--------------------|--|--|
| NCR: | es/ | / No | | | | | WORK ORDER NON-CONFORMANCE / UPDATE | | | | | | | | | | |
| | | | | | | | | | | · · · · · · · · · · · · · · · · · · · | | QA Closed: | Date | e: | | | |
| Vork Orde | er: | | | | | | DISPOSITION | | AGAINST DEPARTMENT/PROCESS | | | | | | | | |
| Part i | • | | | | | | Rework Scrap | Skid-tube Crosstube Machining Small Fab | | | Prod. Eng. Coor. | | | Engineering Quality Other | | | |
| NCR i | No. | | | | | | Use-as-is Work Order Update | | Thermoforming Finishing Large Fab Composite | | | | | | | | |
| Root | | | | | Desc | crip | otion of work order update | Ī | nitial | Act | tion | Sign & | | | | | |
| Cause | | Date | Step | Qty | | c | or Non-conformance | Ch | ief Eng | Desci | ription | Date | Verification | | QC Inspector | | |
| oc/Data | | | | | | | | | | | | | | | | | |
| quip/Tooling | | | | | | | | | | | | | | | | | |
| perator | | | | | | | | 1 | | | | | | | | | |
| laterial | | | | | | | | | | | | | | | | | |
| etup | | | | | | | | | | | | | | | | | |
| ther | | | | | | | | | | | | | | | ٠ | | |
| rocess | | | | | | | | | | | | | | | | | |
| upplier | | | | | ļ | | | | | | | | | | | | |
| raining | | | | | | | | 1 | | | | | | | | | |
| napproved | | | | | | | | | | | | | | | | | |
| | | | | | | | F | AUL | T CATE | GORY | | | | | | | |
| Landi | ng (| Sear | | | _ | | General | | _ | | | | _ | _ | | | |
| | | Bending | | | [| | Bend | | Grain | | | Ovalized | | P | ressure/Forced | | |
| | | Centre No | ot Concer | ntric to | o/s | | BOM/Route | | Hardwa | re | | Over/Under | tolerance | | emperature/Cure | | |
| | | Cracks | | | [| | Broken/Damaged | | Inspect | ion Incomplete | | Part Incorre | ct | \v | Veld | | |
| | | Crushed/0 | Crimped. | | | | Burrs | | Instruct | ions Incomplete/ | Unclear | Part Lost/M | issing | \v | Vrong Stock Pulled | | |
| | | Cuffs | | | [| | Contamination | | Mainte | enance | | Part Moved | | | į | | |
| | | Heat Trea | t, | | ſ | | Countersink | |] Mislabe | eled | | Positioned Wrong | | | | | |
| | | Inspection | n Strip in | Tube | Ī | | Cut Too Short | | Misread | t | | Power Loss/Surge Other | |)ther | | | |
| | | Ripples in | Bend | | | | Drill Holes | | Offset | | _ | | | | | | |

Out of Calibration

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio